DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-001707
Date Inspected: 15-Mar-2008

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Japan Steel Works, Ltd.

OSM Arrival Time: 830
OSM Departure Time: 1830
Location: Muroran, Japan

CWI Name: Chung Kuan

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No		
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☐ Yes	☑ No	☐ N/A	
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A	
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A	
				Approved WPS:	☑ Yes	☐ No	☐ N/A	
				Delayed / Cancelled:	☐ Yes	☐ No	☑ N/A	

Bridge No: 34-0006
Component: PQR Test Plate, SW-4-1

Summary of Items Observed:

On this date OSM Quality Assurance Representative Daniel L. Reyes observed the casting of the cable saddles, welding of the structural steel components and inspection relative to this project. The following was observed:

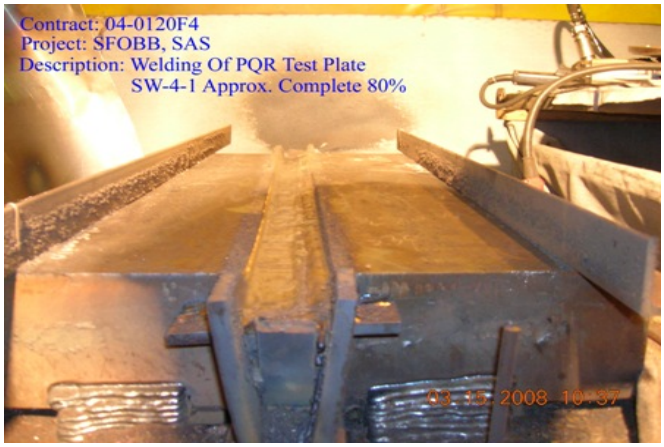
At the start of the shift this QA inspector observed the continued welding and inspection of the Procedure Qualification Record (PQR) test plate identified as SW-4-1. The welding was performed by Japan Steel Works, Ltd. welding personnel Ko Payashi ID 08-5023 utilizing the gas shielded Flux Cored Arc Welding (FCAW-G) process as per the Welding Procedure Specification (WPS) SJ-2942 WP-5 which was also used by the Quality Control (QC) Inspector Chung Kuan as a reference. The consumable utilized during the welding of the test plate was manufactured by Hobart Brothers and appeared to be identified as a Tri-Mark TM-95K2 with a diameter of 1. 6 millimeters.

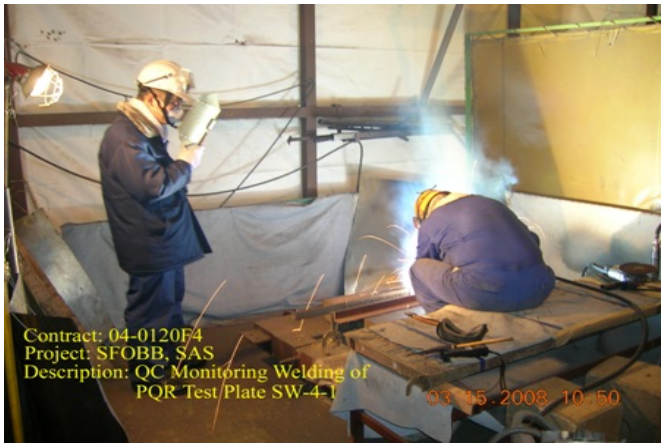
The QC inspector Chung Kuan verified the minimum preheat temperature of 164 degrees Celsius and the maximum interpass temperature of 190 degrees Celsius. At the conclusion of verifying the surface temperatures the welder Mr. Payashi continued the welding of the fill passes. At this time the QA inspector observed Chung Kuan verify the amperage, voltage and the travel speed. The average welding parameters were observed as follows; 345amps, 36.0 volts with a travel speed measured at 292 mm/m.

Later in the shift this QA inspector observed, at random intervals, the QC inspector Chung Kuan perform the in process weld inspection and verify the following; the minimum preheat temperature, maximum interpass temperature and the DCEP welding parameters. The welding of the Test Plate identified as SW-4-1 was not completed during this shift on this date and appeared to comply with the WPS. (See Digital Photographs)

WELDING INSPECTION REPORT

(Continued Page 2 of 2)





Summary of Conversations:

There were general conversations with the Quality Control (QC) Inspector Chung Kuan relative to the Procedure Qualification Record Test and the location of the welding personnel.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Venkatesh Iyer, (858) 967-6363, who represents the Office of Structural Materials for your project.

Inspected By:	Reyes,Danny	Quality Assurance Inspector
Reviewed By:	Brasel,Ron	QA Reviewer